

AMENDMENTS

In the Drawings:

Replace the drawings with the attached sheets, in which the boxes in the figures have been labeled as required.

Attachment: Replacement sheets.

REMARKS

In response to the drawing objection in paragraph 1 on page 2 of the Action, applicant submits replacement drawings in which the boxes are labeled as required. Withdrawal of the drawing objection is respectfully requested.

Applicant has replaced pending claims 26-53 with new claims 54-75, which focus on the division of the tactile alarm into physically discrete segments corresponding to distinct physical properties. Entry of new claims 54-75, which do not introduce new matter, is respectfully requested.

Claims 26-53 stand rejected under 35 USC 103(a) on Russek alone. This rejection is respectfully traversed in light of the amendments above.

In essence, Russek does not disclose the claimed aspects of the invention that involve the use of tactile stimulation to transmit a message corresponding to an emergency alarm condition; to impart multiple messages simultaneously via tactile stimulation; and imparting particulars of a message via changes in intensity and/or frequency of tactile stimulation applied in response to the emergency condition. The discrete segments of the claimed tactile sensor produce this result, of which Russek contains no disclosure or suggestion.

Russek discloses the use of a pager based remote alarm system where the pagers include a vibrational alert which indicates a message has been sent to the pager. A master alarm controller activates by messaging one or more pages in response to a particular alarm signal. It is important to note that Russek's alarm controller directs a message to the pagers, which indicates by a vibrational alert on the pager *only* that a message has been received by the pager. Every other piece of information which the Examiner claims is "coded" is provided for visual display on a visual display unit on the pager and is not provided in the form of a tactile (i.e., by touch) signal as in the claimed invention. Russek is silent on varying the intensity of the vibrations provided by the "enunciator" or the spatial distribution of the vibrations, or to provide vibrations having a varying frequency to

impart information. In Russek, once the operational alert is activated on a pager, the user must necessarily read the screen of the pager to have any idea or understanding as to what alarm condition has occurred, or if a message regarding unrelated matter to the alarms is sent to the pager by other than the master controller.

Column 3, lines 29-36, of Russek indicate that Russek's system is designed not to disturb or traumatise patients while still necessarily alerting medical practitioners or the like. As stated at lines 33-36, "information is conveyed silently by using vibration enunciation specifically designed lighted displays, for communications devices that have minimum audio warning features..." (emphasis added). The latter communications devices presumably include mobile telephones or a tap on the shoulder. Although this disclosure might seem to suggest some form of tactile signalling, it does not suggest tactile sensor segments or the use of differentiable tactile signals as claimed.

The function of Russek's system is sufficiently different from the invention as claimed that Russek would not have motivated persons of ordinary skill in the art to arrive at the claimed invention. For example, in column 4, lines 4-18, 28-34 and 45-59, Russek states that the master control in each display unit includes information concerning the availability of medical staff so as to only send messages to the pagers of those staff who are working. At line 28 of column 4, it is stated that the system of the disclosure of Russek "may also be used to replace or augment the overhead audio paging system to provide non-audio messages to summon a particular doctor to a specific location." That is, the system of Russek merely acts as a router and activates a pager so as to display textual information on a visual display unit corresponding to what Russek defines as transmitted "coded information". At line 46, it is stated that the alarm signal generates and transmits an (RF) coded pulse signal in response to a sensor signal indicating an alarm condition, the alarm signal generator provides various information relating to the patient and/or equipment type and location for "display on the master control and display unit". Immediate transmission from the master unit is then stated to occur by sending an electronically coded message to each group of

paggers so that the message can be viewed on each pager. The differences between Russek and the present invention are emphasized at column 5, line 5, where it is noted that “a nurse can directly page the physician from the patient’s bedside without delay and without alarming the patient”. Column 5, lines 16ff., indicates that the visual display may include “lights indicative of a patient problem or equipment malfunction”. This is not transmitting such information via tactile stimulation but by visual messages that are transmitted to paggers for display on visual display units. Also, as indicated at column 5, lines 25ff., it is essential that Russek’s paggers include some form of visual display and an LCD or LED based display is described. It is stated that the “coded alarm signal provides the information which is processed in the microprocessor circuitry [of the pager] to actuate an array of lights and/or liquid crystal or LED elements which make up the display face of the pager”. There is no indication as to using tactile stimulation in Russek as anything other than an indication that a message of some description has been received by the pager. See also col 13 from line 20 describing the function of the signal generator 48.

Although the sentence starting at column 7, line 45, indicates that the “alarm signal pulse generator 12... converts the signal into a coded pulse that identifies the patient, the room, the ambulance or other relevant location information,” this is for display on the pager only. Referring to column 8 lines 40 to 57, it is stated “the appropriate group of paggers...has a vibrational enunciator in lieu of or in addition to audio enunciator capabilities so that the wearer, once feeling a vibration, will position the pager for visually observing a display face having visual indicia. It is shown on the pager...a series of lights may be provided to show room and patient identification that require immediate response. Alternatively, lights can be arranged to indicate other information such as ambulance number or patient’s telephone number...” (emphasis added). This is significantly different to providing tactile stimulation through a tactile alarm divided into segments wherein each segment provides stimulation in response to a separate pre-determined physical property falling

outside a pre-determined range, and in which the applied tactile stimulation can be varied in spatial distribution or applied intensity to transmit information.

Russek clearly does not teach the modulation of the vibrational signal to be indicative of either the physical property or the magnitude the property has fallen outside a pre-determined range. These are significant points of difference between Russek and the invention as to which Russek provides no motivation to bridge. Russek's goal is to provide an automated system to alert groups of doctors without alerting patients and this system simply does not overcome the problems addressed by the present invention. Russek in fact teaches away from the invention, as shown in the discussion at column 6, line 15, of walkie-talkie equipment. There is no suggestion in the disclosure of Russek that the system is useful for medical practitioners in a surgical theatre environment, for example, as in those cases, the relevant people having the "group" of pagers would presumably be conducting the surgery. In order to take the integers of the system disclosed in Russek to arrive at the invention of either claim 54 or 55, a substantial and significant departure from the principle of operation of Russek would be required. The only way to get from Russek to the invention is to use 20/20 hindsight to interpret Russek's disclosure in light of applicant's present invention, for example, that RF coded information is somehow equivalent to tactile stimulation.

From the disclosure of Russek, it is clear that there are significant differences between the prior art and claims 54 and 55. The level of ordinary skill in the art is significantly lower than claimed by the Examiner. The Examiner takes "Official Notice" that in the tactile alarm art the use of strips having a receiver for receiving signals is well known and would be therefore obvious to a person skilled in the art that the invention should be incorporated into a strip into the pagers of Russek. Applicant respectfully submits that the Examiner may not rely on "Official Notice" in this manner. In order for the Examiner to take Official Notice, the facts so noticed must be of notorious character and only serve to "fill in the gaps". That is, the notice of facts beyond the record must be "capable of such instant and unquestionable demonstration as to defy dispute". The level of

“Official Notice” taken by the Examiner falls so far outside the bounds of proper official notice that applicant calls upon the Examiner pursuant to 37 CFR 1.104(d)(2) to cite prior art or provide an affidavit of personal knowledge so as to allow applicant the means to rebut the Examiner’s position.

Therefore, the Examiner should provide evidence, not mere supposition, that in the tactile alarm art the use of strips having a receiver for receiving signals to activate a tactile alarm is well known. Furthermore, is the Examiner asserting that the pager itself is in a form of a strip and commonly known to do so (or other tactile alarms in the tactile alarm art), or is the Examiner referring to the shape and design of printed circuit board housing a vibrational stimulator used in the pager for example. The Examiner appears to be in error taking Official Notice on this point.

Finally, applicant submits that the Examiner’s taking of Official Notice of the allowability of audible and visual alarms to be deactivated so that only a tactile alarm is capable of being activated is contradicted by the disclosure of Russek itself at column 15, lines 46-48, relating to only allowing enunciation by vibration.

It is therefore respectfully submitted that a tactile alarm having segments corresponding to different properties as claimed is not taught or suggested by the prior art. Likewise, in the case of claim 27, in which the tactile stimulation pulses themselves are coded dependent on the property and where the pulses can also vary in intensity or in spatial distribution or in frequency of application over the tactile stimulator, Russek is entirely devoid of disclosure even to hint at such an invention. It is not possible for Russek even to contemplate these features, as it would be contradicted by the disclosure at column 14 of Russek.

In accordance with the foregoing, early action allowing claims 54-75 is solicited.

In the event that the transmittal form is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief (such as payment of a fee under 37 C.F.R. § 1.17 (p)) is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in

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Respectfully submitted,

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